

Claims

What is claimed is:

- 5 1. In an electronic mail system, a method for resolving a display name associated with an intended recipient of a message item, comprising the steps of:
- receiving in an address field said display name;
 determining whether said display name
10 uniquely matches one of a plurality of registered users of said electronic mail system; and
 in response to said display name uniquely matching one of said registered users, displaying in said address field recipient data corresponding to said matching registered
15 user,
 otherwise, displaying ambiguous address data in said address field.
2. The method recited in claim 1, wherein said
20 ambiguous address data comprises said display name and predetermined indicia.
3. The method recited in claim 1, wherein recipient data corresponding to said matching registered user
25 comprises at least a portion of a name of said matching registered user.
4. The method recited in claim 1, wherein said
step of determining whether said display name uniquely matches
30 one of a plurality of registered users is processed while a user composes the remainder of said message item.

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5. The method recited in claim 1, further comprising the steps of:

receiving in said address field first user input corresponding to said ambiguous address data;

5 displaying, in response to said first user input, a list of registered users corresponding to said ambiguous address data;

receiving second user input corresponding to a selected one of said displayed list of registered users; and

10 in response to said second user input, displaying in said address field recipient data corresponding to said selected registered user.

6. The method recited in claim 5, further
15 comprising the step of creating a nickname entry characterized by said display name being associated with said selected registered user.

7. In an electronic mail system, a method for using nicknames to resolve the name of an intended recipient of a message item, comprising the steps of:

- receiving in an address field a display name
5 associated with said intended recipient;
determining whether said display name corresponds to a previously stored nickname;
in response to said display name corresponding to said previously stored nickname, displaying in said address
10 field nickname data corresponding to a registered user of said electronic mail system associated with said previously stored nickname;
otherwise, determining whether said display name uniquely matches one of a plurality of registered users of
15 said electronic mail system; and
in response to said display name uniquely matching one of said registered users, displaying in said address field recipient data corresponding to said matching registered user,
20 otherwise, displaying ambiguous address data in said address field.

8. The method as recited in claim 7, wherein said ambiguous address data comprises said display name and
25 predetermined indicia.

9. The method as recited in claim 7, wherein said nickname data comprises at least a portion of a name of said
30 registered user and predetermined indicia.

10. The method as recited in claim 7, wherein recipient data corresponding to said matching registered user comprises at least a portion of a name of said matching registered
35 user.

11. The method as recited in claim 7, wherein said steps of determining whether said display name corresponds to a previously stored nickname and determining whether said display name uniquely matches one of a plurality of registered users are performed while a user composes the remainder of said message.

12. The method as recited in claim 7, further comprising the steps of:
- receiving in said address field first user input corresponding to said ambiguous address data;
 - displaying, in response to said first user input, a list of registered users corresponding to said ambiguous address data;
 - receiving second user input corresponding to a selected one of said displayed list of registered users; and
 - in response to said second user input, displaying in said address field recipient data corresponding to said selected registered user.

13. The method as recited in claim 12, further comprising the step of creating a nickname entry characterized by said display name being associated with said selected registered user.

14. The method as recited in claim 7, further comprising the steps of:
- receiving in said address field first user input corresponding to said nickname data;
 - displaying, in response to said first user input, a list of registered users corresponding to said nickname data;
 - receiving second user input corresponding to a selected one of said displayed list of registered users; and
 - in response to said second user input, displaying in said address field recipient data corresponding to said selected registered user.

15. The method as recited in claim 14, further comprising the step of updating a nickname entry in which said display name is stored in association with said selected registered user.
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16. A computer system for using nicknames to resolve the name of an intended recipient of a message item, comprising:

- 5 a central processing unit (CPU);
 an input device connected to said CPU;
 a display device coupled to said CPU; and
 memory coupled to said CPU for storing a
program module;
 said CPU, responsive to instructions from said
10 program module, being operative to:
 receive from said input device a display
name indicative of said intended recipient, said display name
being entered in an address field displayed on said display device;
 determine whether said display name
15 corresponds to a previously stored nickname;
 in response to said display name
corresponding to said previously stored nickname, display in said
address field nickname data corresponding to a registered user
associated with said nickname;
20 otherwise, determine whether said
display name uniquely matches one of a plurality of registered
users of said electronic mail system; and
 in response to said display name
uniquely matching one of said registered users, display in said
25 address field recipient data corresponding to said matching
registered user,
 otherwise, display ambiguous address
data in said address field.

- 30 17. The computer system recited in claim 16,
wherein said ambiguous address data comprises said display name
and predetermined indicia.

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18. The computer system recited in claim 16, wherein said nickname data comprises at least a portion of a name of said registered use and predetermined indicia.

5 19. The computer system recited in claim 16, wherein recipient data corresponding to said matching registered user comprises at least a portion of a name of said matching registered user.

10 20. The computer system recited in claim 16, wherein said CPU is further operative to:
 receive in said address field first user input
 corresponding to said ambiguous address data;
 display, in response to said first user input, a
15 list of registered users corresponding to said ambiguous address
 data;
 receive second user input corresponding to a
 selected one of said displayed list of registered users; and
 in response to said second user input, display in
20 said address field recipient data corresponding to said selected
 registered user.

 21. The computer system recited in claim 20,
25 wherein said CPU is further operative to create a nickname entry
 characterized by said display name being associated with said
 selected registered user.

22. The computer system recited in claim 16, wherein said CPU is further operative to:

receive in said address field first user input corresponding to said nickname data;

5 display, in response to said first user input, a list of registered users corresponding to said nickname data;

receive second user input corresponding to a selected one of said displayed list of registered users; and

10 in response to said second user input, display in said address field recipient data corresponding to said selected registered user.

23. The computer system recited in claim 22, wherein said CPU is further operative to update a nickname entry

15 in which said display name is stored in association with said selected registered user.

24. A computer-readable medium on which is stored a computer program for resolving a display name associated with an intended recipient of a message item, said computer program comprising instructions which, when executed

5 by a computer, perform the steps of:

receiving in an address field said display name;

determining whether said display name uniquely matches one of a plurality of registered users of said electronic mail system;

10 in response to said display name uniquely matching one of said registered users, displaying in said address field recipient data corresponding to said matching registered user; and

15 otherwise, displaying ambiguous address data in said address field.

25. The computer-readable medium recited in claim 24, wherein said ambiguous address data comprises said display name and predetermined indicia.

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26. The computer-readable medium recited in claim 24, wherein recipient data corresponding to said matching registered user comprises at least a portion of a name of said matching registered user.

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27. The computer-readable medium recited in claim 24, further comprising the steps of:

receiving in said address field first user input corresponding to said ambiguous address data;

5 displaying, in response to said first user input, a list of registered users corresponding to said ambiguous address data;

receiving second user input corresponding to a selected one of said displayed list of registered users; and

10 in response to said second user input, displaying in said address field recipient data corresponding to said selected registered user.

28. The computer-readable medium recited in claim 27, further comprising the step of creating a nickname entry characterized by said address data being associated with said selected registered user.

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29. In an electronic mail system for transmitting a message item, said message item including a plurality of properties, a method for including a flag with said message item, comprising the steps of:

- 5 receiving flag data indicative of said flag;
storing said flag data as one of said plurality of properties; and
transmitting said message item to a recipient via said electronic mail system.

10 30. The method recited in claim 29, wherein said flag data identifies a follow-up action associated with said message item, and further comprising the steps of:

- 15 receiving due date data indicative a date by which said follow-up action is to be performed; and
storing said due date data as one of said plurality of properties.

20 31. The method recited in claim 29, wherein said plurality of properties includes a status property indicative of whether said message item includes flag data.

25 32. The method recited in claim 29, wherein said flag data includes text representing an instruction to the recipient of said message item.

33. In an electronic mail system for receiving message items, said message items including a plurality of properties, a method for displaying the status of a follow-up action associated with said message items, comprising the steps of:

5 receiving one of said message items, said message item including a status property associated with said follow-up action;

determining whether said message item includes said status property;

10 in response to a determination that said message item includes said status property, retrieving status data stored with said status property; and

displaying said status data in conjunction with said message item.

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34. The method recited in claim 33, wherein said displayed status data indicates whether said message item includes a follow-up action.

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35. The method recited in claim 34, wherein said displayed status data indicates whether said follow-up action is complete.

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36. The method recited in claim 33, wherein said status data includes text and is displayed in conjunction other text associated with said message item.

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37. The method recited in claim 33, further comprising the steps of:

receiving a plurality of said message items; and
sorting said message items according to data included in said status property.

38. In an electronic mail system for receiving message items, said message items including a plurality of properties, a method for providing an indication corresponding to due date associated with said message item, comprising the steps of:

receiving one of said message items, said message item including a due date property;
retrieving due date data from said due date property;
comparing said due date data to the current time; and
displaying an indication corresponding to the relationship between said due date data and the current time.

39. The method recited in claim 38, wherein said indication indicates that said due date is past due.

40. The method recited in claim 38, wherein said indication is an alarm indicating that said due date will occur within a predetermined period of time.

41. In an improved message item for transmission in an electronic mail system, the improvement comprising:

a message flag property including message flag data indicative of a follow-up action associated with said message item; and

a status property including status data indicative of whether said follow-up action has been completed by a recipient of said message item.

42. The improvement recited in claim 41, further comprising a due date property including due date data indicative of a time by which said follow-up action should be completed.

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43. A computer-readable medium on which is stored a computer program for indicating a follow-up action associated with a message item, said computer program comprising instructions which, when executed by a computer, perform the steps of:

adding a message flag property to said message item;

receiving message flag data indicative of said follow-up action;

storing said message flag data in said message flag property; and

transmitting said message item to a recipient via an electronic mail system.

44. The computer readable medium recited in claim 43, wherein said steps performed by said computer further comprise:

adding a due date property to said message item;

receiving due date data indicative a date by which said follow-up action is to be performed; and

storing said due date data in said due date property.

45. The computer readable medium recited in claim 43, wherein said message item further comprises a status property indicative of whether said message flag property includes message flag data.

46. In an electronic mail system for transmitting an item, said item including a plurality of properties, a method for transmitting custom form data as part of said item, comprising the steps of:

5 obtaining said custom form data, said custom form data indicative of the layout of a custom form comprising a plurality of fields for displaying field data stored in at least one of said plurality of properties;

10 storing said custom form data in one of said plurality of properties in response to obtaining said custom form data; and

transmitting said item to a recipient.

47. The method of Claim 46, further comprising
15 the steps of:

receiving said field data from said fields as input; and

20 storing said field data in said at least one of said plurality of properties.

48. The method of Claim 46, wherein said step of obtaining said custom form data comprises the steps of:

displaying a form;

altering said form in response to input; and

25 creating said custom form data corresponding to said altered form.

49. In an electronic mail system for receiving an item, a method for displaying an item comprising the steps of:

receiving said item, said item including a plurality of properties;

5 determining whether said item includes a form property;

in response to a determination that said message item includes said form property, retrieving form data stored in said form property;

10 otherwise, retrieving form data from a form registry; and

displaying said item in the context of a form, said form being defined by said form data.

15 50. The method of Claim 49, wherein said form data defines the layout of a plurality of fields of said form, and wherein information is displayed in said fields, said information being stored in at least one of said plurality of properties.

20 51. The method of Claim 49, wherein said form registry comprises data stored on a memory storage device, said data corresponding to a description of at least one form.

25 52. The method of Claim 49, wherein said form property comprises data corresponding to a description of said form.

53. A computer-readable medium on which is stored a computer program for transmitting custom form data as part of an item, said computer program comprising instructions which, when executed by a computer, perform the steps of:

- 5 adding a form property to said item;
 obtaining said custom form data, said custom form data indicative of the layout of a custom form comprising a plurality of fields for displaying field data stored in at least one of a plurality of properties;
10 storing said custom form data in said form property in response to obtaining said custom form data;
 receiving said field data from said fields as input;
 storing said field data in said at least one of
15 said plurality of properties; and
 transmitting said item to a recipient.

54. The computer-readable medium recited in Claim 53, wherein said step of obtaining said custom form data comprises the steps of:

- 20 displaying a form;
 altering said form in response to input; and
 creating said custom form data corresponding
to said altered form.
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55. A computer-readable medium on which is stored a computer program for displaying an item in the context of a form, said computer program comprising instructions which, when executed by a computer, perform the steps of:

- 5 receiving said item, said item including a plurality of properties;
determining whether said item includes a form property;
in response to a determination that said item
10 includes said form property, retrieving form data stored in said form property;
otherwise, retrieving form data from a form registry; and
15 displaying said item in the context of a form, said form being defined by said form data.

56. The computer-readable medium of Claim 55, wherein said form data defines the layout of a plurality of fields of said form, and wherein information is displayed in said fields,
20 said information being stored in at least one of said plurality of properties.

57. The computer-readable medium of Claim 55, wherein said form registry comprises data stored on a memory storage device, said data corresponding to a description of at least one form.
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58. The computer-readable medium of Claim 55, wherein said form property comprises data corresponding to a description of said form.
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59. In an improved item for transmission in an electronic mail system, said item including a plurality of properties, the improvement comprising:

- form data stored in a form property, said form
5 data defining a custom form used to display said item.

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60. In an electronic mail system for transmitting a message item, a method for sending to a plurality of recipients a message item and automatically tallying responses of said plurality of recipients to said message item, comprising the steps of:

- 5 creating said message item, said message item including a query and a plurality of predefined responses;
 transmitting said message item to said plurality of recipients;
 receiving a reply message item from at least
10 one of said recipients, said reply message item including reply data corresponding to one of said predefined responses; and
 tallying said response corresponding to said reply data included in said reply message item.

- 15 61. The method of Claim 60, wherein said step of creating said message item, comprises the steps of:
 adding an autoresponse property to said message item;
 receiving response data corresponding to said
20 plurality of predefined responses entered by the sender of said message item; and
 storing said response data in said autoresponse property.

- 25 62. The method of Claim 60, wherein said message item further includes a plurality of voter properties, each of said voter properties corresponding to one of said plurality of recipients.

63. The method of Claim 60, wherein said reply message item further includes a reply property and a message identification property, said reply property including said reply data stored in said reply property, said message identification property including identification data stored in said message identification property, said identification data identifying a sent mail copy of said message item, and wherein tallying said response comprises the steps of:

- reading said identification data;
- 10 locating said sent mail copy of said message item based on said identification data;
- locating a voter property in said sent mail copy of said message item in response to locating said sent mail copy, said voter property corresponding to said at least one of said
- 15 recipients; and
- storing said reply data in said voter property.

64. The method of Claim 60, wherein said step of tallying said response occurs automatically at predefined times without any intervention from the sender of said message item.

65. The method of Claim 63, further comprising the steps of:

- calculating voting results for each predefined
- 25 response, said voting results equal to the number of recipients who selected each of said plurality of predefined responses; and
- displaying said voting results to said sender of said message item in response to input from said sender.

66. The method of Claim 65, wherein said step of displaying said voting results further comprises the steps of:

- displaying a name corresponding to each of said recipients, and
- displaying said predefined response selected by
- 35 each said recipient.

67. In an electronic mail system for transmitting and receiving message items, a method for selecting one of a plurality of predefined responses in reply to a message item that includes a query, comprising the steps of:

- 5 opening said message item, said message item including response data corresponding to said plurality of predefined responses,
 displaying a plurality of voting buttons, each said voting button corresponding to one of said predefined
10 responses;
 receiving input corresponding to the selection of one of said voting buttons;
 creating a reply message item, said reply message item including a plurality of properties; and
15 storing reply data in at least one of said plurality of properties, said reply data corresponding to said selected one of said voting buttons.

68. The method of Claim 67, wherein said step of
20 storing reply data comprises the step of storing said reply data in a vote property of said reply message item, such that said message item may be updated by storing said reply data from said vote property in a voter property in said message item.

- 25 69. The method of Claim 67, wherein said step of storing reply data comprises the step of storing said reply data in a subject property of said reply message item, such that said reply data will be displayed in the subject field of said reply message item.

70. A computer-readable medium on which is stored a computer program for selecting one of a plurality of predefined responses in reply to a message item that includes a query, said computer program comprising instructions which, when executed by said a computer, perform the steps of:
- opening said message item, said message item including response data corresponding to said plurality of predefined responses,
 - displaying a plurality of voting buttons, each said voting button corresponding to one of said predefined responses;
 - receiving input corresponding to the selection of one of said voting buttons;
 - creating a reply message item, said reply message item including a plurality of properties; and
 - storing reply data in at least one of said plurality of properties, said reply data corresponding to said selected one of said voting buttons.

71. The computer-readable medium as recited in Claim 70, wherein said step of storing reply data comprises the step of storing said reply data in a vote property of said reply message item, such that said message item may be updated by storing said reply data from said vote property in a voter property in said message item.

72. The computer-readable medium as recited in Claim 70, wherein said step of storing reply data comprises the step of storing said reply data in a subject property of said reply message item, such that said reply data will be displayed in the subject field of said reply message item.

73. A computer readable medium on which is stored a computer program for sending to a plurality of recipients a message item and automatically tallying responses of said plurality of recipients to said message item, said computer
5 program comprising instructions which, when executed by said a computer, perform the steps of:

creating said message item, said message item
including a query and a plurality of predefined responses;
transmitting said message item to said plurality
10 of recipients;
receiving a reply message item from at least
one of said recipients, said reply message item including reply
data corresponding to one of said predefined responses; and
tallying said response corresponding to said
15 reply data included in said reply message item.

74. The computer-readable medium as recited in Claim 73, wherein said step of creating said message item, comprises the steps of:
20 adding an autoresponse property to said
message item;
receiving response data corresponding to said
plurality of predefined responses entered by the sender of said
message item; and
25 storing said response data in said autoresponse
property.

75. The computer-readable medium as recited in Claim 73, wherein said reply message item further includes a reply property and a message identification property, said reply property including said reply data stored in said reply property, said message identification property including identification data stored in said message identification property, said identification data identifying a sent mail copy of said message item, and wherein tallying said response comprises the steps of:

- reading said identification data;
- 10 locating said sent mail copy of said message item based on said identification data;
- locating a voter property in said sent mail copy of said message item in response to locating said sent mail copy, said voter property corresponding to said at least one of said
- 15 recipients; and
- storing said reply data in said voter property.

76. The computer-readable medium as recited in Claim 73, further comprising the steps of:

- 20 calculating voting results for each predefined response, said voting results equal to the number of recipients who selected each of said plurality of predefined responses; and
- displaying said voting results to said sender of said message item in response to input from said sender.

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77. The computer-readable medium as recited in Claim 76, wherein said step of displaying said voting results further comprises the steps of:

- displaying a name corresponding to each of
- 30 said recipients, and
- displaying said predefined response selected by each said recipient.

78. A computer system for sending to a plurality of recipients a message item and automatically tallying the responses of said plurality of recipients, comprising:

a central processing unit (CPU);

5 an input device coupled to said CPU for receiving data input by a user;

a pixel-based display device coupled to said CPU for displaying data; and

said CPU being operative to:

10 create said message item, said message item including a query and a plurality of predefined responses;

transmit said message item to said plurality of recipients;

15 receive a reply message item from one of said recipients, said reply message item including a reply property and a message identification property, said reply property including reply data, said message identification property including identification data identifying a sent mail copy of said message item;

20 open said reply message item;

read said identification data in said message identification property;

locate said sent mail copy of said message item based on said identification data;

25 locate a voter property in said sent mail copy of said message item, said voter property corresponding to said one of said recipients; and

store said reply data in said voter

property.

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79. In an improved message item for transmission in an electronic mail system, said message item including a plurality of data properties, the improvement comprising:

- 5 an autoreponse property including data indicative of a number of predefined responses to a query in said message item;

a vote property including reply data indicative of the predefined response selected by a recipient of said message item; and

- 10 a plurality of voter properties corresponding to each of said recipients of said message item, said voter properties being used to store reply data received from said recipients.

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